/\*quque using linked list\*/

#include<stdio.h>

#include<stdlib.h>

struct node

{

int data;

struct node\*next;

};

struct node\*front;

struct node\*rear;

void insert();

void delete1();

void display();

int main()

{

int ch=0;

while(ch!=4)

{

printf("\*\*\*main menu\*\*\*\n");

printf("\n1.insert an element\n2.Delete an element\n3.Display the queue\n4.Exit\n");

printf("\nEnter your choice ?");

scanf("%d",&ch);

switch(ch)

{

case 1:

insert();

break;

case 2:

delete1();

break;

case 3:

display();

break;

case 4:

exit(0);

break;

default:

printf("\nEnter valid choice??\n");

}

}

}

void insert()

{

struct node \*ptr;

int item;

ptr = (struct node \*) malloc (sizeof(struct node));

if(ptr == NULL)

{

printf("\nOVERFLOW\n");

return;

}

else

{

printf("\nEnter value?\n");

scanf("%d",&item);

ptr -> data = item;

if(front == NULL)

{

front = ptr;

rear = ptr;

front -> next = NULL;

rear -> next = NULL;

}

else

{

rear -> next = ptr;

rear = ptr;

rear->next = NULL;

}

}

}

void delete1 ()

{

struct node \*ptr;

if(front == NULL)

{

printf("\nUNDERFLOW\n");

return;

}

else

{

ptr = front;

front = front -> next;

free(ptr);

}

}

void display()

{

struct node \*ptr;

ptr = front;

if(front == NULL)

{

printf("\nEmpty queue\n");

}

else

{ printf("\nprinting values .....\n");

while(ptr != NULL)

{

printf("\n%d\n",ptr -> data);

ptr = ptr -> next;

}

}

}

